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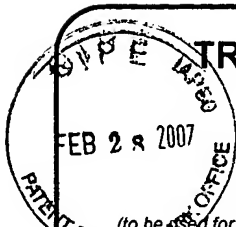
PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

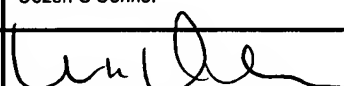
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|--|------------------------|---------------------|
|  <b>TRANSMITTAL FORM</b><br>(to be used for all correspondence after initial filing) | Application Number     | 10/589,811          |
|  | Filing Date            | August 17, 2006     |
|  | First Named Inventor   | Mark Greene         |
|  | Art Unit               | To be Determined    |
|  | Examiner Name          | To be Determined    |
| Total Number of Pages in This Submission   | Attorney Docket Number | UPN0018-100 (Q3395) |

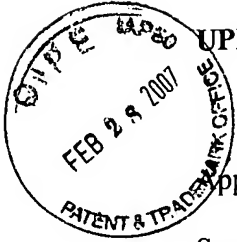
| ENCLOSURES (check all that apply)  |  |   |
|--|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached/Authorized<br><input type="checkbox"/> Amendment / Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Form PTO SB/08a and SB/08b(3pp.); 35 reference cited; 20 copies of references submitted; return card.. |
| <b>Remarks</b><br>EXPRESS MAIL LABEL NO: EV 770974192 US<br>DATE OF DEPOSIT: February 28, 2007   |  |   |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT |   |          |        |
|--|---|----------|--------|
| Firm                                       | Cozen O'Connor  |          |        |
| Signature                                  |  |          |        |
| Printed Name                               | Mark DeLuca   |          |        |
| Date                                       | February 28, 2007   | Reg. No. | 33,229 |

| CERTIFICATE OF TRANSMISSION/MAILING  |  |      |  |
|--|--|------|--|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below |  |      |  |
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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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UPN0018-100 (Q3395)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Mark I. Greene et al.

Serial No.: 10/589,811

Group Art Unit: To be determined

Filed: August 17, 2006

Examiner: To be determined

Title: REAGENTS, KITS AND METHODS FOR IMMUNODETECTION OF  
EPITOPES ON MOLECULES

EXPRESS MAIL LABEL NO: EV 770974192 US  
DATE OF DEPOSIT : February 28, 2007

**MAIL STOP AMENDMENT**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. §§ 1.56 and in accordance with 37 C.F.R. §§ 1.97 and 1.98, information relating to the above-identified application is hereby disclosed, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO Forms SB/08A and Forms SB/08B, formerly known as PTO Form 1449, submitted herewith.

Inclusion of the information submitted herewith is not to be construed as an admission that the information is material as that term is defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

**This Information Disclosure Statement is being filed:**

- ☐ within three months of the filing date of the patent application.
- ☐ within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 of the international application.
- ☒ before the mailing date of a first Office Action on the merits.

- ☐ after the mailing date of a first Office Action on the merits, but before the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, and accordingly is accompanied by:
- ☐ the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below);
- or
- ☐ the Fee of \$180.00 set forth in 37 C.F.R. § 1.17(p); or
- ☐ No fee is owed by the applicant(s).
- ☐ In accordance with 37 C.F.R. § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, and accordingly is accompanied by the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below) and the fee of \$180.00 as set forth in 37 C.F.R. § 1.17(p), is attached.
- ☐ after the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, but before the payment of the Issue Fee, and accordingly is accompanied by the Statement under 37 C.F.R. § 1.97(e), (see "Statement," and "Fees" below).
- ☒ Copies of the references (except the U.S. Patent documents) listed on the attached PTO Forms SB/08a and SB/08b, formerly known as PTO Form 1449, are enclosed.

**EXCEPT THAT:**

- ☒ In view of the voluminous nature of reference BF and the likelihood that this reference is available to the Examiner, a copy is not enclosed herewith.
- ☐ In accordance with 37 C.F.R. § 1.98(d), copies of the following references listed on the attached PTO Form SB/08A and PTO Form SB/08B, formerly known as PTO Form 1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application.

- ☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

**Statement under 37 C.F.R. § 1.97(e)**

- ☐ The undersigned attorney hereby states that each item information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.

**Fees**

- ☒ No Fee is owed by the applicant(s).
- ☐ The Information Disclosure Statement Fee of \$180.00 under 37 C.F.R. § 1.17(p) is enclosed herewith.

**Method of Payment of Fees**

- ☐ Attached is a check in the amount of \$ \_\_\_\_\_. This form is submitted in duplicate.
- ☐ Charge Deposit Account No. 50-1275 in the amount of \$180.00. This form is submitted in duplicate.
- ☒ Please charge any deficiency or credit any overpayment to Deposit Account 50-1275.
- ☒ No fee or Statement is required under 37 C.F.R. § 1.97(b).

Respectfully submitted,

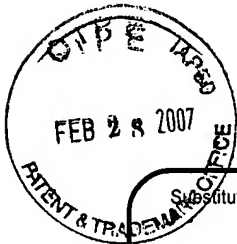


**Mark DeLuca**

Registration No. 33,229

Dated: February 28, 2007

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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

## Complete if Known

|                        |                   |
|------------------------|-------------------|
| Application Number     | 10/589,811        |
| Filing Date            | August 17, 2006   |
| First Named Inventor   | Mark Greene       |
| Art Unit               | To be Determined  |
| Examiner Name          | To be Determined  |
| Attorney Docket Number | UPN0018-100/Q3395 |

## U.S. PATENT DOCUMENTS

| Examiner<br>Initials * | Cite<br>No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear |
|------------------------|--------------------------|--|--------------------------------|--|---|
|                        |                          | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
|                        | AA                       | US-09/977,716                              | n/a                            | Mark Greene et al.                                 |   |
|                        | AB                       | US-7,045,286                               | 05-16-2006                     | Mark Greene et al.                                 |   |
|                        | AC                       | US-6,743,592                               | 06-01-2004                     | Mark Greene et al.                                 |   |
|                        | AD                       | US-5,665,539                               | 09-09-1997                     | Takeshi Sano et al.                                |   |
|                        | AE                       | US-5,922,553                               | 07-13-1999                     | James Eberwine et al.                              |   |
|                        | AF                       | US-5,334,702                               | 08-02-1994                     | Mark I. Greene et al.                              |   |
|                        | AG                       | US-5,663,144                               | 09-02-1997                     | Mark I. Greene et al.                              |   |
|                        | AH                       | US-5,919,764                               | 07-06-1999                     | Mark I. Greene et al.                              |   |
|                        | AI                       | US-6,022,523                               | 02-08-2000                     | William F. Degrado et al.                          |   |
|                        | AJ                       | US-5,436,134                               | 07-25-1995                     | Richard P. Haugland et al.                         |   |
|                        | AK                       | US-6,291,650                               | 09-18-2001                     | Gregory Paul Winter et al.                         |   |
|                        | AL                       | US-6,225,447                               | 05-01-2001                     | Gregory Paul Winter et al.                         |   |
|                        | AM                       | US-6,172,197                               | 01-09-2001                     | John McCafferty et al.                             |   |
|                        | AN                       | US-6,140,471                               | 10-31-2000                     | Kevin Stuart Johnson et al.                        |   |

## FOREIGN PATENT DOCUMENTS

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document  | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup> |
|-----------------------|--------------------------|--|--------------------------------|---|--|----------------|
|                       |                          | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if<br>known) |                                |   |  |                |
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| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet

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of

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**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 10/589,811        |
| Filing Date            | August 17, 2006   |
| First Named Inventor   | Mark Greene       |
| Art Unit               | To be Determined  |
| Examiner Name          | To be Determined  |
| Attorney Docket Number | UPN0018-100/Q3395 |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  | T <sup>2</sup> |
|---------------------|-----------------------|--|----------------|
|                     | AO                    | Felix, A.M., "Applications of BOP reagent in solid phase synthesis", Int. J. Pep. Prot. Res. 1988 31:231-238.  |                |
|                     | AP                    | Giralt, E. and Andreu eds, <i>In Peptides</i> , ESCOM, Leiden, The Netherlands 1991,131-133.   |                |
|                     | AQ                    | Hendrickson et al., "High sensitivity multianalyte immunoassay using covalent DNA-labeled antibodies and polymerase chain reaction," <i>Nucleic Acids Research</i> (1999), 23 (3): 522-529.  |                |
|                     | AR                    | Hruby, "Conformational restrictions of biologically active peptides via amino acid side chain groups," <i>Life Sci.</i> (1982) 31: 189-199.  |                |
|                     | AS                    | Leone et al., "Molecular beacon probes combined with amplification by NASBA enable homogeneous, real-time detection of RNA," <i>Nucleic Acids Res.</i> (1998), 26 (9): 2150-2155.  |                |
|                     | AT                    | Murali et al., "Structure-based design of immunologically active therapeutic peptides," <i>Immunol. Res.</i> (1998) 17: 163-169.   |                |
|                     | AU                    | Ploux, O. et al., "Cyclization of peptides on a solid support. Application to cyclic analogs of substance P," <i>Int. J. Pep. Prot. Res.</i> (1987), 29: 162-169.  |                |
|                     | AV                    | Prasad et al., "Contrasting solution conformations of peptides containing alpha,alpha-dialkylated residues with linear and cyclic side chains," <i>Biopolymers</i> (1995) 35: 11-20.   |                |
|                     | AW                    | Porstmann, T. et al., "Enzyme immunoassay techniques. An overview," <i>J Immunol Methods.</i> (1992), 150(1-2):5-21.   |                |
|                     | AX                    | Portsmann, B. et al., "Which of the commonly used marker enzymes gives the best results in colorimetric and fluorimetric enzyme immunoassays: horseradish peroxidase, alkaline phosphatase or beta-galactosidase?" <i>J Immunol Methods</i> (1985), 79(1):27-37. |                |
|                     | AY                    | Reichmann et al., "Expression of an antibody Fv fragment in myeloma cells," <i>J. Mol. Biol.</i> (1988), 203: 825-828.   |                |
| Examiner Signature  |                       | Date Considered  |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Sheet 3 of 3

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| Examiner Name          | To be Determined  |
| Attorney Docket Number | UPN0018-100/Q3395 |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials * | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|------------------------|--------------------------|---|----------------|
|                        | AZ                       | Romani, S. et al., "Synthesis of the trypsin fragment 10-25/75-88 of mouse nerve growth factor. II. The unsymmetrical double chain cystine peptide," <i>Int. J. Pep. Prot. Res.</i> (1987), 29: 107-117)  |                |
|                        | BA                       | Saragovi et al., "Design and synthesis of a mimetic from an antibody complementarity-determining region," <i>Science</i> (1991), 253: 792-795.  |                |
|                        | BB                       | Schiller et al., "Synthesis of side-chain to side-chain cyclized peptide analogs on solid supports," <i>Int. J. Pep. Prot. Res.</i> (1985), 25: 171-177.  |                |
|                        | BC                       | Schweitzer et al., "Inaugural article: immunoassays with rolling circle DNA amplification: a versatile platform for ultrasensitive antigen detection," <i>Proc Natl Acad Sci U S A.</i> (2000), 97(18):10113-9.   |                |
|                        | BD                       | Sheppard, R. C., "Acid-labile resin linkage agents for use in solid phase peptide synthesis," <i>Int. J. Peptide Res.</i> (1982), 20: 451-454.  |                |
|                        | BE                       | Skerra and Pluckthun, "Assembly of a functional immunoglobulin Fv fragment in <i>Escherichia coli</i> ," <i>Science</i> (1988), 240:1038-1044.  |                |
|                        | BF                       | Harrison et al. United States Biochemical Pharma. Ltd. (Europe), Watford, United Kingdom)   |                |
|                        | BG                       | Tan et al., "Molecular beacons: a novel DNA probe for nucleic acid and protein studies," <i>Chemistry</i> (2000), 6: 1107-1111.   |                |
|                        | BH                       | Tannous et al., "T7 RNA polymerase as a self-replicating label for antigen quantification," <i>Nucleic Acids Res</i> (2002), 30(24):e140.   |                |
|                        | BI                       | Williams et al., "Development of biologically active peptides based on antibody structure," <i>Proc. Natl Acad. Sci. USA</i> (1989), 86: 5537-5541.   |                |
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|                       |                    |
|-----------------------|--------------------|
| Examiner<br>Signature | Date<br>Considered |
|-----------------------|--------------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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